

Dear editor Jocelyn Lavalley and reviewer #2,

We really appreciate you to give us the chance of revision. Many thanks for your comments concerning our manuscript entitled “Soil nutrient stoichiometry varied with tea plantation age and soil depth at an aggregate scale in the southern Guangxi of China” (SOIL-2021-147). We have made the corrections which we hope will meet with your approval. The revised portions are marked in blue ink in the paper. The main corrections and our responds to the comments are as follows.

**Editor:**

Many thanks for your thorough revisions according to the referee reports. The reviewer has some outstanding comments based on your revised version. Please consider these comments and provide a revised version.

Response: Thank you so much for your time and comments. We have invited a native English speaker to edit the manuscript in order to improve the logical flow and make the relevant expressions more clear. Please see the revised manuscript.



This document certifies that the following manuscript was edited for proper English language by one or more of the highly qualified native English speaking editors at Boyi Translation Co.,Ltd. Tangshan, China.

**Manuscript title:**

Soil nutrient contents and stoichiometry within aggregate size classes varied with tea plantation age and soil depth in the southern Guangxi of China

**Date Issued**

June 6, 2022



*Magie Trans*

## Reviewer #2:

The authors have addressed many of the concerns raised during the initial review. I have some additional comments regarding the revisions that the authors may wish to consider.

Response: Thank you so much for your time and comments.

The manuscript readability would be greatly improved with grammatical revisions throughout.

Response: We have invited a native English speaker to edit the manuscript in order to improve the logical flow and make the relevant expressions more clear. Please see the revised manuscript.

Title, elsewhere: this study was performed at a landscape or regional scale, not at an “aggregate scale”. A more appropriate term for “aggregate scale” could be “within aggregate size classes.”

Response: Revised (L 1 and elsewhere).

Should the title read “Soil nutrient contents and stoichiometry...” to highlight that both contents and stoichiometry were presented in the manuscript?

Response: Revised (L 1).

L28-29, L511-512: The concluding sentence of the abstract and the conclusions section is very general and does not provide the reader with a concrete take-away message. I suggest making these conclusion sentences specific to the study by relating the most significant finding back to the study impetus.

Response: Revised (L 26-28 and L 518-520).

L42-43: By “China is the first nation to plant tea across the globe,” do you mean that China is the world’s largest producer of tea?

Response: Revised (L 41-42).

L55: It is not clear what is meant by “equilibrium features.” Please elaborate upon or rephrase this sentence.

Response: Revised (L 53-55).

L69-76: To interpret the apparent discrepancy in C:N ratios with depth among studies, it is important to consider whether the studies measured total C or organic C. If total C was measured, then C:N ratio might increase with depth due to increasing soil carbonates at depth. However, if organic C was measured, then any carbonates would be eliminated and the C:N ratio would be more likely to decrease with depth unless a buried organic horizon was present.

Response: Revised (L 73-74).

L98-107: The objective and hypothesis are quite general and “observational” in nature. Were there specific questions or hypotheses that were being addressed? For example, “we hypothesized that OC and TN content would increase with tea plantation age ...”

Response: Revised (L 104-107).

L139: It is not clear what is meant by “certain underlying mixture effects.” Does this mean “confounding factors?”

Response: Revised (L 139).

L144: A reference to Fig. 1 should be placed here.

Response: Revised (L 145).

L167: The reference to Table 1 and a description of the results within should be made in the results section.

Response: Revised (L 213-221).

L196: It is not clear what is meant by “parallel specimens.” Does this mean “analytical replicates” or “analytical duplicates?”

Response: Revised (L 194-195).

L206-207: Please provide a reference for SPSS 22.0.

Response: Revised (L 204).

L218: Please label the Tables and Figures to match the order that they are referenced in the manuscript.

Response: Revised (L 216).

L260-262: The sentence could be revised to clarify what the values are “elevated” above.

Response: Revised (L 268-270).

L365-370: This seems redundant with the previous paragraph. Can this information be combined with the previous paragraph?

Response: Revised (L 374-380).

L410-411: It is not clear what is meant by “triggered by the stratification of humic substance.” In addition, the historical concept of humic substances is now mostly considered to be an artifact of the substance extraction procedures. I suggest providing an alternative rationale for decreasing C:N ratio with depth, such as older/more processed OM at depth.

Response: Revised (L 419-421).

L506-507: Nutrient management assessments should be performed annually for each site, and therefore broad N fertilization recommendations for the entire region are not appropriate.

Response: Deleted.

Table 2: Please use more conventional symbols to indicate significance level, such as \*\* for  $p < 0.01$ , \* for  $p \leq 0.05$ , and NS for  $p > 0.05$  (i.e., “not significant”).

Response: Revised (Table 1).

Figure 1 legend: Please provide more details about the experimental design in the figure legend.

Response: Revised (Figure 1).

We believe that we have revised and improved this manuscript to the best of our abilities. In addition, we have made further changes according to the useful and helpful comments you have provided. We sincerely appreciate your time and effort on our behalf, and we truly hope that these corrections will meet with your approval.

Best regards,

Shengqiang Wang